

PR#9833

SMOLEN, MICHAEL

3/27/2009

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OKLAHOMA

STATE OF OKLAHOMA, et al.,
Plaintiff,

vs.

CASE NO. 05-CV-00329-GKF SAJ

TYSON FOODS, INC., et al.,
Defendants.

DEPOSITION OF MICHAEL DAVID SMOLEN, Ph.D.
TAKEN ON BEHALF OF THE DEFENDANTS
ON MARCH 27, 2009, BEGINNING AT 9:30 A.M.
IN STILLWATER, OKLAHOMA

APPEARANCES:

On behalf of the PLAINTIFF:

Mr. Robert Nance
RIGGS, ABNEY, NEAL, TURPEN, ORBISON & LEWIS
5801 North Broadway, Suite 101
Oklahoma City, Oklahoma 73118
(405)843-9909
rnance@riggsabney.com

On behalf of the DEFENDANT-PETERSON FARMS, INC.:

Mr. Scott McDaniel
MCDANIEL, HIXON, LONGWELL & ACORD
320 South Boston, Suite 700
Tulsa, Oklahoma 74103
(918) 382-9200
smcdaniel@mcdaniel-lawfirm.com

REPORTED BY: Laura L. Robertson, CSR, RPR

EXHIBIT

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1 WHEREUPON,

2 MICHAEL DAVID SMOLEN,
3 after having been first duly sworn, deposes and says
4 in reply to the questions propounded as follows,
5 to-wit:

6 BY MR. MCDANIEL:

7 Q. Dr. Smolen, would you state your full name,
8 please, sir?

9 A. Michael David Smolen.

10 Q. Would you give us both your work and home
11 addresses?

12 A. Work address is 218 Ag Hall, Stillwater,
13 74078. Home address, 3409 South Washington Street,
14 Stillwater, 74074.

15 Q. All right. Thank you. Who is your
16 employer?

17 A. Oklahoma State University.

18 Q. What is your position?

19 A. I'm a professor of Biosystems and Ag
20 Engineering, and an extension appointment, 100 percent
21 extension.

22 Q. All right. Can you explain to us what your
23 job responsibilities are?

24 A. I serve as the water quality coordinator for
25 extension programs and division of agriculture and

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1 natural resources.

2 Q. And what does it mean to say that you direct
3 these programs, give us an understanding of what sort
4 of programs and what your role is?

5 A. Okay. My role is developing water quality
6 programs for extension around the state. That's
7 primarily education programs for the public. I'm also
8 involved in just about every other kind of faculty
9 role. I participate in research, publication and a
10 little bit of teaching occasionally, but primarily
11 coordinating extension programs.

12 Q. All right. For the benefit of the court and
13 the jury that may not be familiar when you use the
14 term extension or extension programs, please explain
15 what that is.

16 A. Yes, the land-grant university has three
17 components, research, traditional formal education,
18 classroom education and public service outreach
19 extension. That's what the extension refers to.

20 In the case of the division of agriculture
21 natural resources, we have -- we are part of what is
22 called a cooperative extension service, which is a
23 partner with USGA. And the cooperative extension
24 service has offices in every county of the state, and
25 extension personnel in almost all of those counties,

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1 educators in all of those counties.

2 And then I work with those educators. We
3 also have district offices, there are four of those,
4 and extension specialists in various areas at the
5 state level, I am officially a state specialist.
6 There are also area specialists in the district
7 offices.

8 Q. All right. When you said there were four
9 district offices, where are they located?

10 A. One is in Muskogee, one is in Ada, one is in
11 Duncan and one is in Enid.

12 Q. Dr. Smolen, I went online at the Biosystems
13 and Ag Engineering website and you have -- you have
14 your own web page or your own website. And on there
15 was a curriculum vitae for you, and I printed it off.
16 I'm not going to worry about making it an exhibit, but
17 would you take a minute and look at that and tell me
18 if you believe it is current.

19 A. Probably is not current. Let's see, yes,
20 this is 2006. It is current as of the date that's on
21 here, which is October 2006.

22 Q. What would be the significant additions to
23 your CV that are not noted there?

24 A. Well, it depends what you mean by
25 significant.

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1 contribution from non-point sources occur during a
2 large runoff event?

3 A. Yes, I would say that's correct.

4 Q. All right. And would we typically expect
5 that to include phosphorous, which had originated with
6 land applied poultry litter?

7 MR. MCDANIEL: Object to the form.

8 THE WITNESS: Yes, I would say that's
9 correct.

10 Q. (BY MR. NANCE) Is there phosphorous from
11 land applied poultry litter in a large runoff event in
12 the Illinois River Watershed?

13 MR. MCDANIEL: Object to the form.

14 THE WITNESS: Is there phosphorous in runoff
15 from --

16 Q. (BY MR. NANCE) From poultry litter in a
17 major runoff event from that watershed?

18 A. I believe the answer is yes. I'm trying to
19 think if I have direct measurement of runoff. Yes, I
20 think I can find some studies that show it, too.

21 Q. Okay. Would there be a consensus among
22 water quality professionals who have studied the
23 Illinois River Watershed about whether or not poultry
24 originating with -- excuse me, phosphorous originating
25 with poultry litter gets into the water in the

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1 watershed?

2 MR. MCDANIEL: Object to the form.

3 THE WITNESS: I believe there would be.

4 Q. (BY MR. NANCE) What would that consensus
5 be?

6 MR. MCDANIEL: Same objection.

7 THE WITNESS: As we have used in our
8 reports, or we have shown in our reports, phosphorous
9 from poultry production or from fields fertilized with
10 poultry litter is probably the number one source.

11 Q. (BY MR. NANCE) Okay. Let's look at page 65
12 of Exhibit 2. Do you have that in front of you?

13 A. Yes, I do.

14 Q. On that pie chart there, which is figure
15 9.2, where it says, "Litter application is 15 percent
16 of the Illinois River total phosphorous load," does
17 that 15 percent refer to direct load from the litter
18 itself on the ground, or from something else?

19 A. No, that's directly from the litter.

20 Q. Okay.

21 A. That's the result of subtracting the
22 presence and absence of litter in the model.

23 Q. Okay. Is there any part of the other
24 non-point source component which is 50 percent on that
25 pie chart which comes from elevated STP which

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1 interesting question. And I don't know that the
2 answer is -- I have an opinion on it, but I don't know
3 that it is necessarily right.

4 Oklahoma cannot tell individual landowners
5 in Arkansas what to do. They can sue -- they can
6 require something of the state of Arkansas. Last I
7 heard, though, that was not adequate for the TMDL. So
8 I don't know.

9 As far as I know, there is no way that
10 Oklahoma can control non-point source in Arkansas
11 directly.

12 Q. (BY MR. NANCE) Are you familiar with the
13 findings of OSU that soil test phosphorous rating of
14 65 is sufficient, at least for forage grasses for
15 phosphorous needs?

16 A. Yes.

17 Q. What is the relationship between increasing
18 soil test phosphorous and increase -- and
19 concentrations of phosphorous in runoff from a field
20 as the STP goes up?

21 A. Yes, there is a direct relationship.
22 Increase in soil test phosphorous results in
23 increasing runoff concentration.

24 Q. Is that a relationship that's pretty well
25 understood by scientists in your profession?

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1 MR. MCDANIEL: Object to the form.

2 THE WITNESS: Yes, it is.

3 (Plaintiff's Exhibit 9 marked for
4 identification)

5 Q. (BY MR. NANCE) Let me show you, Dr. Smolen,
6 what I have marked, just to stay consecutive as
7 Exhibit No. 9 to your deposition, and ask you if you
8 are familiar with that document?

9 A. Yes, I am.

10 Q. Would you tell me briefly what it is?

11 A. It is basically a fact sheet developed by
12 our plant and soil science department. They produce
13 these from time to time on use of, or on management of
14 crops in particular. And this one addresses the
15 phosphorous recommendations.

16 Q. Would you tell us, just read me the name of
17 it so we will know for the record what we are looking
18 at?

19 A. Science Based Animal Waste Phosphorous
20 Management for Oklahoma.

21 Q. What is the date it was issued, sir?

22 A. January 1998.

23 Q. Were you involved in discussions about this
24 document contemporaneous with its issuance?

25 A. Yes. Actually, I'm not -- I'm not sure I